Listing of Claims:

1. (Currently amended): A method in a data processing system for managing traffic in a network data processing system, the method comprising:

monitoring <u>at a server</u> the traffic for a plurality of TCP connections or UDP associations through a given network path; and

prior to sending a packet on a particular TCP connection or UDP association within the plurality of TCP connections or UDP associations, determining if the packet will cause the traffic for the network path to exceed a level of traffic allowed and, if the packet will cause the traffic for the network path to exceed the level of traffic allowed, reducing the traffic for one of the particular TCP connection or UDP association and another TCP connection or UDP association using an action based on a transmission protocol corresponding to the one TCP connection or UDP association.

2. (Previously presented): The method of claim 1, wherein the traffic is monitored using at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

3. (Previously presented): The method of claim 1, wherein when the one TCP connection or UDP association comprises a TCP connection, the action comprises:

reducing a congestion window size by multiplying an amount of bandwidth available by a dynamic variable that is adjusted using changing requirements of the network path to reduce the amount of bandwidth available based on a fair share for the one TCP connection.

4. (Previously presented): The method of claim 3, wherein the congestion window size is reduced as follows:

$$CW = max(MinW, min(CW*F,MaxW))$$

wherein CW is the congestion window size, MinW is a minimum congestion window size for the one TCP connection, MaxW is a maximum congestion window size for the one TCP connection, and F is the dynamic variable.

5.   (Previously presented): The method of claim 1, wherein the action comprises:

setting a quality of service for packets.

6.   (Previously presented): The method of claim 1, wherein the action comprises:

dropping the packet.

7.   (Currently amended): A method in a data processing system for managing traffic in a
network data processing system, the method comprising:

monitoring at a server traffic for each of a plurality of TCP connections or UDP
associations through a given network path; and

prior to sending a packet on a selected TCP connection or UDP association within the
plurality of TCP connections and UDP associations, determining if the packet will cause the
traffic for the network path to exceed a threshold and, if the packet will cause the traffic for the
network path to exceed the threshold, further determining if the packet will cause the traffic for
the selected TCP connection or UDP association to exceed its fair share amount of the network
path and if so, reducing the traffic for the selected TCP connection or UDP association using an
action based on a transmission protocol corresponding to the selected TCP connection or UDP
association.

8.   (Previously presented): The method of claim 7, wherein the traffic comprises at least one
of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

9.   (Previously presented): The method of claim 7, wherein when the selected TCP
connection or UDP association comprises a selected TCP connection the action comprises:

reducing a congestion window size by multiplying an amount of traffic by a dynamic
variable that is adjusted using changing requirements of the network path to reduce the traffic for
the selected TCP connection.

10.   (Previously presented): The method of claim 7, wherein the action comprises:

reducing a sending size for data packets.

11.   (Canceled)

12.   (Previously presented): The method of claim 7, wherein the threshold takes into account a fair share of bandwidth available for the plurality of TCP connections or UDP associations.

13-45. (Canceled)

46.   (Previously presented): The method of claim 1, wherein if the packet will cause the traffic for the network path to exceed the level of traffic allowed for the network path, further determining if the packet will cause the traffic for the particular TCP connection or UDP association to exceed its fair share amount of the network path and if so reducing the traffic for the particular TCP connection or UDP association.

47.   (Currently amended) The method of claim 1, wherein said monitoring at a server comprises monitoring at a server source the traffic for the plurality of TCP connections or UDP associations through a given network.

48.   (New) The method of claim 7, wherein said monitoring at a server comprises monitoring at a source the traffic for the plurality of TCP connections or UDP associations through a given network.